REMARKS

Reconsideration and withdrawal of the objection to and rejections of the claims, in view of the amendments and remarks herein, is respectfully requested. Claims 57 and 62 are amended, and claims 66 and 69-70 are canceled. Claims 57-65, 67-68, and 71-76 are now pending in this application.

Claims 57 and 62 were objected to as being drawn to non-elected inventions. The amendment to claims 57 and 62, to recite that the one or more agents are sulfhydryl-containing agents, obviates the objection to claims 57 and 62.

Claims 58-66, 68 and 71-74 are rejected under 35 U.S.C. § 102(b) as being anticipated by Perl et al. (Biotechnology, 14:624 (1996)) and claims 57-60, 62-67, 71-73, and 75-76 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Enrique-Obregón et al. (Biotechnologia Aplicada, 14:169 (1997)). These rejections are respectfully traversed.

Perl et al. disclose that short exposures of diluted cultures of *Agrobacterium* to embryogenic calli of *Vitis vinifera* cv. Superior Seedless grape result in plant tissue necrosis and subsequent cell death (abstract) (the Examiner notes that grape is a dicot plant at page 5 of the Office Action dated March 13, 2007). To determine the effect of various antioxidants on necrosis, Perl et al. added antioxidants to the solid co-cultivation medium (Table 1). Perl et al. relate that the presence of polyvinyl pyrrolidone (PVP), cysteine, ascorbic acid, or citric acid in the solid co-cultivation medium was unable to reduce necrogenesis, while the presence of dithiothreitol (DTT) or polyvinyl polypyrrolidone (PVPP) in the solid co-cultivation medium reduced browning to some extent but did not completely inhibit the phenomenon (page 625). Note that Perl et al. report that the presence of cysteine, a sulfhydryl containing agent, in the solid co-cultivation did not reduce necrogenesis.

Perl et al. also relate that an optimal effect in blocking necrogenesis was obtained with a double-layer medium containing PVPP and DTT, but that necrosis was not blocked when a double-layer medium with PVP, ascorbic acid, or cysteine in the solid medium, with or without DTT in the liquid medium, was employed (page 625). It is disclosed that stably transformed grape was obtained after co-cultivation of grape callus with PVPP for 48 hours, followed by

incubating the callus in a double-layer medium with PVPP in the solid layer and DTT in the liquid layer for 7 days (Figure 3).

The Examiner is respectfully reminded that the standard for anticipation is one of strict identity, and to anticipate a claim for a patent a single prior art source must contain all its elements. In re Dillon, 16 U.S.P.Q.2d 1987 (Fed. Cir. 1990).

Claim 57 and claims dependent thereon are directed to a method which employs monocot plant cells or tissue. Grape is not a monocot.

Claim 62 is directed to a method which employs a sulfhydryl containing agent in solid media in an amount effective to enhance the stable transformation of plant tissue or cells and the identification of stable transformants which were cultured on that media. Perl et al. found that optimal inhibition of necrogenesis during co-cultivation was obtained with a double layer medium containing PVPP and DTT. Figure 3 is a flow chart describing the double layer medium/antioxidant procedure that allowed for recovery of stably transformed grape plants. Note that only PVPP is in the solid "under" layer.

Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Enriquez-Obregón et al. report on the effect of three antioxidants on the growth of *Agrobacterium* in sugarcane. It is disclosed that a combination of ascorbic acid, cysteine and silver nitrate was added to the precoculture liquid medium (for 6-12 hours with explants), the coculture medium (10 minutes with *Agrobacterium* in liquid culture, then on solid medium for 3 days), or both. Then explants were placed on selective media and the number of transformants determined (Table 2).

The Examiner asserts that given the recognition of those of ordinary skill in the art in the value of transforming a sugarcane plant to improve the plant's agricultural yields and industrial production as taught by Enriquez-Obregón et al., one of skill in the art would be motivated to use the method of Enriquez-Obregón et al. for transforming sugarcane and to optimize process parameters by varying the cysteine concentration and for transforming of other monocot plants, such as maize, wheat or rice, because one of ordinary skill in the art recognizes that a transformation procedure that works for one member of a group will also work for other members of the group.

Applicant respectfully traverses the assertion that "one of ordinary skill in the art recognizes that a transformation procedure that works for one member of a group will also work for other members of the group" as a form of Official Notice for making a conclusory statement without support of a reference. Applicant respectfully requests a reference to support the assertion or an affidavit of personal knowledge by the Examiner, pursuant to M.P.E.P. § 2144.03, in the next official communication.

Enriquez-Obregón et al. teach that to yield regenerable transformed plant tissue, a combination of three specific agents at particular concentrations should be employed with embryogenic calli. While the use of a higher concentration of each of the individual agents resulted in some explant viability (see Table 2), those explants were not embryogenic (capable of regeneration to a plant). Thus, there is no teaching or suggestion in Enriquez-Obregón et al. of concentrations of any of ascorbic acid, cysteine and silver nitrate that alone enhance the stable transformation of plant cells or tissue that are capable of regeneration. Moreover, in view of the effect of the combination of particular concentrations of ascorbic acid, cysteine and silver nitrate, one of skill in the art in view of Enriquez-Obregón et al. would not be motivated to use any other agents in lieu of the three disclosed agents or use one or more sulfhydryl-containing agents, much less use concentrations of cysteine other than 40 mg/L, to enhance stable transformation of plant cells or tissue.

Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6959 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date January 8, 2008

By _____
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 8th day of January 2008.

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Signature